

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,282	03/13/2004	Matthew E. Colburn	IBM-272	7196
Thomas A. Bec	7590 04/04/200 k, Esq.	EXAMINER		
26 Rockledge Lane			MCPHERSON, JOHN A	
New Milford, CT 06776			ART UNIT	PAPER NUMBER
			1756	
				•
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
31 DAYS		04/04/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

•		Application No.	Applicant(s)			
Office Action Summary		10/799,282	COLBURN ET AL.			
		Examiner	Art Unit			
		John A. McPherson	1756			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status	•		•			
1)	Responsive to communication(s) filed on					
	This action is FINAL . 2b) This action is non-final.					
3)	,					
·	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠	Claim(s) 1-64 is/are pending in the application	n.	·			
	4a) Of the above claim(s) is/are withdrawn from consideration.					
	5) Claim(s) is/are allowed.					
6)	6) ☐ Claim(s) is/are rejected.					
7)	Claim(s) is/are objected to.					
8)⊠	Claim(s) 1-64 are subject to restriction and/or	r election requirement.				
Applicati	on Papers					
9) The specification is objected to by the Examiner.						
10)	The drawing(s) filed on is/are: a) ac	cepted or b) objected to by the	Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority ι	under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
•	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
	·					
Attachmen	t(s)					
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
	, =,,,,,,,					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other:						

Application/Control Number: 10/799,282

Art Unit: 1756

Page 2

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - Claims 1, 13, 51-57 and 60, drawn to a multilevel mold, classified in class
 249, subclass 115.
 - II. Claims 2-12, drawn to a method for producing a multilevel mold, classified in class 430, subclass 320.
 - III. Claims 14-31, 59 and 61-64, drawn to a multilevel dual damascene structure, classified in class 428, subclass 44.
 - IV. Claims 32-50 and 58, drawn to a system comprising a plurality of elements functioning in combination to fabricate a dual damascene structure, classified in class 425, subclass 174.4.

Examiner's note: claim 59 is drawn to "the method defined in claim 14", however claim 14 is drawn to "a multilevel dual damascene structure", not to a method.

Furthermore, claim 59 refers to "said curable material", which is the material utilized in the structure of claim 14, but is not utilized in the method of claims 2-12. Accordingly, claim 14 has been included with Group III, as it is assumed that it was intended to be a drawn to the presently claimed structure, not to the presently claimed method.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The

inventions are distinct if either or both of the following can be shown: (1) that the

process as claimed can be used to make another and materially different product or (2)

Art Unit: 1756

that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process, such as a process comprising exposure through a single grayscale photomask.

Inventions II and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process, such as being molded from a multilevel mode made by exposure through a grayscale mask.

Inventions IV and III are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a materially different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a materially different product, such as a light guide plate for a liquid crystal display.

Inventions II and IV are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus Art Unit: 1756

as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus can be used to practice another and materially different process, such as a process wherein the dual damascene structure is fabricated from a mold pattered with a grayscale mask.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

3. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions

Art Unit: 1756

unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

- 4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. McPherson whose telephone number is (571) 272-1386. The examiner can normally be reached on Monday through Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Application/Control Number: 10/799,282

Art Unit: 1756

Page 6

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John A. McPherson Primary Examiner Art Unit 1756

JAM 4/2/07